

3rd Aug 2020

Dr Conor Houghton
Ms Chris Bennett
Faculty of Engineering Research Ethics Committee (FREC)
Queens Building University Walk
Bristol
BS8 1TR
Telephone: (0117) 331 5830

Dear Dr Houghton and Ms Bennett,

Ref: 109702

Title: Developing an affect enhanced "Turrellian" RGB LED lamp designed to improve mood: towards multimodal affect-sensitive computing and devices.

Initially, I would like to express my thanks and appreciation. I am very grateful for your advice and thorough review of my research and ethical documentation for my MSc thesis in these difficult circumstances. Indeed, I am inexperienced with ethical University documentation – so your guidance has been most helpful.

Before you proceed and read the changes made in the actual documentation (all changes have been highlighted yellow for ease of readability), I believe it is best to proceed with an outline of the changes I have made – to address your queries:

- *“Q9 and Q17 -The committee would welcome clarification on obtaining written and/or verbal participant consent. They would welcome clarification on handling of the Consent Form to avoid potential transmission of Covid-19.”*
 - I have expressed that written and verbal consent need to both be achieved – both forms of consent will be received over email and Skype preventing interaction during the pandemic.
- *“Q24 – The committee would welcome further clarification on data storage, data use and the procedures around anonymization.”*
 - I have clarified anonymous participant numbers will be used and emphasised local storage on a laptop in anonymised CSV files so as to best mitigate data breaches.
- *“The committee would welcome further clarification on the nature of the affective state data. For example, they noted that some affective state surveys include sensitive questions and require care.”*
 - Throughout documentation affective state data has been changed to heart rate and skin temperature (for clarity) and no sensitive questions will be asked – participants questionnaire forms use the Attrakdif methodology and involve word pairs charting their thoughts of the product.
- *“The committee noted physiological data can have medical import.”*
 - This has been clarified.
- *“The committee noted the PIS Sheet uses technical language such as affective state and IoT Turrellian LED lamp. They suggest this is clarified to the participants.”*

- This terminology has been removed and replaced with more simplistic wording such as heart rate and skin temperature.
- *“Is there potential for the participant to be left feeling distressed rather than with an enhanced mood?”*
 - No, the lamp is designed for solely encouraging good moods through aesthetically pleasing colour combinations. However, if the lighting is found to be in anyway distressing or uncomfortable – participants are encouraged to immediately turn off the LED lamp and the experiment can be appropriately terminated without questions asked.
- *“The committee would welcome clarification on the questions asked in the survey and semi-structured interview.”*
 - The questionnaire will involve ranking between two antonymic word pairs ie. is the product more professional or unprofessional?
- *“The committee would welcome clarification on participant recruitment; will any participants be approached directly?”*
 - I am working with a corporate partner, an SME based in London – they will provide employees interested in trialling the device over Skype. GDPR links are appropriately included in the documentation.
- *“Or, if you wish to proceed with this study please provide full details of how data collection can proceed virtually.”*
 - Courier will deliver the sanitised lamps to the participant on the day of testing. Consequently, I will conduct the experiment virtually over Skype calls. Participants will arrange the Skype call with me and delivery location over email. When the lamps are returned to me – I will sanitize them so as not to get contaminated from participants. Data will be collected via emailed web links to participants and hosted on google forms – participants fill in the forms and follow guidance during the Skype call.
- *“it is vague in its description of data storage, data use and the procedures around anonymization.”*
 - I have tried to add greater clarity, emphasising questionnaire data, local hard-drive storage, anonymous participant numbers – which are generated randomly and protection of sensitive documentation such as consent forms.
- *“it suggests collecting affective state data without detailing what these data will be, some affective state surveys, for example, include sensitive questions and require care.”*
 - No sensitive questions are included in the survey and participants are free to withdraw if any discomfort or duress is mistakenly caused. The lamp is solely focused on providing good moods and a positive user experience.
- *“physiological data can have medical import and the participant information sheet needs to reflect that, it should describe these data to the participant and make it clear the data will not be reviewed medically.”*
 - The physiological sensor is worn on the wrist like a Fitbit or watch, it is completely non-invasive and comfortable. The data (skin temperature and heart rate) will not be medically reviewed and solely orient the lamp.

I hope I have suitably addressed your queries and concerns with the experimentation. I look forward to hearing from you regarding if there are any more considerations that need to be appropriately addressed. Thank you so much for your time and effort once again.

Many thanks.

Yours sincerely,

Humphrey Curtis
MSc Computer Science

Dr Paul O’Dowd
Lecturer, Department of Computer Science